

LCD MEGATEST

INTRODUCTION

For a PC that's comfortable and easy to use, a good display is essential. A poor-quality display with a fuzzy picture can make using your PC painful, while having a display that's inadequate for your needs can make everyday tasks harder than they need be. Fortunately LCD monitors are now cheaper than ever, so you can purchase a huge, high-quality display for less than £200.

This month we've tested 18 of the latest displays, from inexpensive 19in models, ideal if you're building a new PC on a tight budget, to luxury 20, 21 and 22in models that make a great upgrade if your existing display is too small. Many have extra video inputs, so you can connect them to a DVD player or camcorder, and some have adjustable stands that make working more comfortable. Some even support HDCP, so they're ideal for viewing the latest high-definition discs. Whatever you want to watch, we'll help you to choose a display that delights.

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FLATSCREEN PRICE CRASH

The prices of LCD screens have plummeted. We test 18 of the latest low-cost models with everything from photos to games and even high-definition movies

Choosing a... Display

Choosing a display can be a tricky task. With dozens of models to choose from, and manufacturers providing a bewildering array of specifications for each one, it's easy to get confused and simply pick one by choosing a familiar brand name or convenient price. In doing so, though, you could end up with a display that's unsuitable for your needs. In this guide we'll explain what to look for and how to make sure your new monitor is a perfect match for you.

NEW FORMS

The first decision is which size and shape of screen you need. We've divided the displays on test into five size categories: standard 19in, 19in widescreen, standard 20/21in, 20.1in widescreen and 22in widescreen. Before you pick a size, decide whether you want a widescreen display or not. If you use your computer for gaming, watching movies or general home use, a widescreen display should be ideal. If you use your computer for office work, though, the extra height of a standard-format screen will probably be more useful to you.

Next, consider your budget. Standard and widescreen 19in displays are inexpensive, so they're a good choice if your budget is tight. If you have more to spend, a 20in or larger display gives you a significantly

higher resolution (except in the case of LG's L2000CE, here), allowing you to fit more windows onscreen at once, or to work more easily on large photographs or video files.

QUALITY TIME

Once you've picked the size and shape of screen that you want, your next consideration should be image quality. Within each size category, some models produce a significantly better image than others. It's impossible to judge image quality from specifications alone, though, so check our reviews carefully. We'll warn you when screens lack focus or reproduce colours inaccurately, and we'll tell you when a particular monitor performed well in our tests.

ONLY CONNECT

Today's computer displays can have other uses besides connecting to your PC. Some of the displays here have extra video inputs, allowing you to connect them to a DVD player, games console or video camera. One even has an HDMI input, making it ideal for connecting to the latest high-definition gadgets.

Four of the displays here also support High-bandwidth Digital Copy Protection, or HDCP. This



allows them to authenticate themselves to high-definition video sources, proving that they are a safe method for displaying video rather than a device that could be used to copy it. Movie studios have the option of restricting full high-definition playback to HDCP devices only, although they are currently not using it.

Some displays here have other useful extras, too. If your PC sits on the floor under your desk, it can be convenient to have USB ports on the monitor where they're easier to reach. Four of the displays here come with a USB hub built in.

Three have four-port USB hubs, but strangely the Philips 190X7FB has just a single USB port.

SOUND BARRIER

Eleven of the monitors reviewed here have built-in speakers. Speakers built into a thin monitor case will never rival a decent dedicated set, but they're fine for undemanding use and will save space on your desk. We tested each set with a range of music tracks, so our reviews can tell you which are painfully tinny and which do a decent job of playing movie soundtracks and music.

How we test Displays

We put each monitor through a set of demanding tests. We use a specialised video splitter to send the same signal to all the monitors in each size category simultaneously, which allows us to spot even the subtlest differences between them. Before running any tests we calibrate each one to ensure that it produces the best possible picture.

First we display a series of test photographs. These have been specially selected for the tests and include high-contrast scenes as well as skin tones. We then use solid colour blocks to check for even illumination and to reveal any dead or stuck

pixels. Thankfully, no displays in this test suffered from any pixel problems.

Our colour wheel tests show up unusual colour casts or difficulties with reproducing a part of the colour spectrum. Our greyscale transition test is particularly taxing. It should display as a perfect, smooth gradient from white to black, but some monitors exhibit spurious bands of grey.

Finally, we run a timed demo in Doom 3 at a very high frame rate to check for problems with smearing or sluggish pixel response. We were pleased to see that no monitor in the group had any difficulties with this test.

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BELINEA 1905 S1

★★★★

£159 inc VAT

Belinea's 1905 S1 is the only monitor in this group to have its VGA cable wired into the display. If anything were to go wrong with the cable, you could be forced to replace the entire monitor. It's also the only standard 19in monitor with no digital DVI input. There are no extras included with this display, and no built-in speakers. Despite this slightly frugal design, though, it's more expensive than both the BenQ and Iiyama 19in monitors.

The 1905 S1 produced good image quality through its D-sub connection. The gradient was smooth in our greyscale test, and the display handled fine detail in high-contrast images very well. Its colour accuracy is impressive, and it's capable of producing rich colours. The control buttons are tucked tidily away beneath the front of the monitor, but they don't include dedicated controls for brightness or contrast.

The 1905 S1 produces good images, but with no digital input or extra features and a relatively high price, it's fairly poor value.



19in LCD 1,280x1,024 native resolution, D-sub connector
PART CODE 1905S1

SUPPLIER www.eclipsecomputers.com

DETAILS www.belinea.com

- ✓ Rich, accurate colours
- ✗ No DVI input; tethered VGA cable

BENQ FP93ES

★★★★

£146 inc VAT

BenQ's FP93ES looks pleasant, with a thin silver bezel and a dark purple stand. This is one of only four monitors in the group – and the only standard 19in screen – to include a height-adjustable stand.

Across the bottom of the screen is a row of six shiny silver control buttons, and these include dedicated controls for brightness and contrast. The built-in speakers are extremely poor, and are unsuitable for playing music.

The FP93ES did not perform well in our tests. Colours looked washed out and unnatural. Selecting the special Movie mode when watching films resulted in richer colours, but also increased speckling and moiré effects in areas of solid colour such as the sky or sea. It couldn't produce much detail from high-contrast images, giving them a slightly blurry look. Our greyscale test showed light banding throughout, and the display couldn't reproduce the very lightest greys at all. There are cheaper displays with better image quality available.



19in LCD 1,280x1,024 native resolution, D-sub, DVI, 3.5mm line in, microphone connectors

PART CODE 9JL2V72HSE

SUPPLIER www.dabs.com

DETAILS www.benq.co.uk

- ✓ Height-adjustable stand
- ✗ Washed out colours; banding in greyscale test

IYYAMA E1900S

★★★★★

£138 inc VAT

With one of the thinnest bezels in the group and a tasteful, matt black finish, Iiyama's E1900S has an air of sophistication. Its control buttons are made from the same black plastic as the stand and surround, so they blend in with the front of the monitor. There are dedicated controls for brightness and contrast. The speakers aren't loud, but they sound acceptable.

Its image quality impressed us greatly. Our greyscale test is particularly hard on monitors, but the E1900S produced the smoothest gradient in the 19in category, and one of the best in the test. Its focus is good, and it did well at picking out detail in dark areas. Colours are realistic and rich but not over-saturated, and skin tones look natural. It's almost as good as the Philips 190X7FB for games, which were sharply detailed and atmospheric. Movies look great too, with natural colours.

This is the cheapest 19in monitor here, but it produces great images. It's an excellent buy.



19in LCD 1,280x1,024 native resolution, D-sub, DVI, 3.5mm line in connectors

PART CODE PLE1900S-B2S

SUPPLIER www.pixmania.co.uk

DETAILS www.iiyama.co.uk

- ✓ Inexpensive; crisp focus; natural, rich colours
- ✗ Speakers could be louder

PHILIPS 190X7FB

★★★★★

£170 inc VAT

The Philips 190X7FB has an industrial look about it, with its square styling, U-shaped stand and speakers that sit behind a long grille under the screen. These speakers are the worst in the group, though, producing a tinny sound that was painful to listen to.

Six control buttons are tucked out of sight down the side of the monitor, including dedicated controls for the brightness and volume. There's also a rather nifty touch-sensitive area on the front of the display that enables you to control the power and switch between the five viewing modes.

This monitor produces crisp, sharp images, and it supports HDCP, which should be useful if you add an HD DVD or Blu-ray player to your computer in future. It's a good screen for watching movies on, too. In standard mode, colours were natural and vivid. Enabling the video playback mode deepened the colours and contrast, but at the expense of colour accuracy. This is an excellent screen, but then so is Iiyama's cheaper E1900S.



19in LCD 1,280x1,024 native resolution, D-sub, DVI, 3.5mm line in, microphone connectors, one-port USB2 hub
PART CODE 190X7FB

SUPPLIER www.morecomputers.co.uk

DETAILS www.philips.co.uk

- ✓ Crisp focus; vivid and natural colours
- ✗ Terrible speakers

ACER X192w

★★★★★

£149 inc VAT

Acer's X192w is one of two monitors in this group to have a glossy coating on the screen. This adds intensity to colours, makes blacks look darker and whites purer. It helps the X192w to produce a level of atmosphere in games that's not normally seen on an LCD monitor.

There is a downside to the glossy coating, though, as it makes the screen highly reflective. At home you might be able to move the display into a position where no bright lights are reflected, but in an office it can be extremely distracting.

The X192w produces a sharp picture with rich, natural colours. Unfortunately, when watching our test movies we noticed speckling in areas of solid colour that rather spoils the picture. The X192w has built-in speakers but they're fairly quiet and tinny, so we wouldn't recommend using them for listening to music or movie soundtracks. This is generally a good screen for home users, but if you don't play games, Mirai's DML-519W100 is better value.



19in WIDESCREEN LCD 1,440x900 native resolution, D-sub, DVI, 3.5mm line in connectors

PART CODE ET.L9508.075

SUPPLIER Acer 0870 853 1005

DETAILS www.acer.co.uk

- ✓ Rich, natural colours; games look great
- ✗ Reflective coating not suitable for some situations

AOC 193SW

★★★

£115 inc VAT

AOC's 193SW costs just £115, but it looks more expensive. Its slim bezel, which at 13mm is the thinnest here, gives it a stylish air that would suit any workplace. Unlike most monitors here it requires an external notebook-style power supply, though, and it has no DVI digital input.

Sadly, it produced the worst Windows desktop in the group test. The green of the grass in the standard Windows XP wallpaper looked unnatural, and the picture didn't look as well focused as it did on the other monitors. We noticed considerable banding throughout our greyscale transition test, and details in games appeared a little soft and fuzzy. Its viewing angles are limited, too. We noticed a significant darkening of the picture as soon as we moved even a little to one side, so you wouldn't be able to gather several people around to view a film or presentation.

This is one of the cheapest monitors here, and it looks fairly good on the surface, but its image quality is particularly poor. It's not a good buy.



19in WIDESCREEN LCD 1,440x900 native resolution, D-sub connector

PART CODE 193SW

SUPPLIER www.pcnextday.co.uk

DETAILS www.aoc-europe.com

- ✓ Inexpensive
- ✗ No DVI input; poor image quality

CTX W1961A

★★★★

£122 inc VAT

CTX's W1961A has a businesslike design, with matt-black styling and a square, hard-edged look. It has no digital input, but it produced a decent image using its analogue D-sub connection.

Colours look natural, but they're not as rich as those on other displays. No matter how much we tried adjusting the settings, they remained slightly muted. The screen isn't illuminated evenly, either, with a slight darkening across the bottom of the display. This problem is only faint, and you might not even notice it, but it stood out in a group in which most screens were evenly lit. We didn't like the onscreen display, as it's unnecessarily awkward to use. There are dedicated control buttons for the volume, but not for changing the brightness or contrast levels. The speakers are quite loud, but they're very tinny and there's noticeable distortion at higher volumes.

Mirai's DML-519W100 is cheaper, produces a better picture and has a DVI digital input, which makes this display look poor value by comparison.



19in WIDESCREEN LCD 1,440x900 native resolution, D-sub, 3.5mm line in connector PART CODE W1961A
SUPPLIER www.lambda-tek.com
DETAILS www.ctxeurope.com

- ✓ Produces natural, if muted, colours
- ✗ Unevenly illuminated; no DVI input

MIRAI DML-519W100

★★★★★

£111 inc VAT



The Mirai DML-519W100's bezel is curved at the top and bottom, giving it a soft, appealing look. The control buttons are located down the side of the screen. Sadly, the symbols showing what each button does are also on the side, and we had to turn the monitor round each time we wanted to use one.

The Mirai has three display modes: text, photo and economy. The screen brightens considerably in photo mode, and the backlight dims in economy mode. Aside from the difference in brightness, colours are unaffected.

Images are sharp and the display performed fairly well in our greyscale transition test, with only a little banding at the lighter end of the gradient. Colours look natural, if not as rich as those on Acer's X192w.

This is the cheapest display in the test, but it produces good image quality. It's a great buy if your budget is tight.



19in WIDESCREEN LCD 1,440x900 native resolution, D-sub, DVI, 3.5mm line in connectors
PART CODE DML-519W100
SUPPLIER www.yoyotech.co.uk
DETAILS www.mirai.eu

- ✓ Inexpensive; crisp focus and natural colours
- ✗ Awkwardly located controls

VIEWSONIC VA1912w

★★★

£116 inc VAT

Like most of the displays in this group, Viewsonic's VA1912w has a silver surround and a black stand. It looks uninspiring but inoffensive. This model has been around for some time now, though, and its age is starting to show.

Like several of the other 19in widescreen monitors here, the VA1912 doesn't have a DVI digital input. When using its D-sub connection the focus isn't quite as crisp as we're used to seeing on a monitor connected by DVI. The VA1912w had particular difficulty with small details in high-contrast photographs, resulting in a slightly fuzzy picture. It didn't reproduce colours well, either, and they appeared murky. You can improve this slightly by adjusting the settings, but we found that they quickly became overly rich and unnatural. Yellow areas looked particularly off colour, leaving skin tones a little sallow.

This is a reasonably priced screen, but its lack of a digital input and unnatural colours make it a poor buy. Mirai's DML-519W100 is £5 cheaper and produces a far better image.



19in WIDESCREEN LCD 1,440x900 native resolution, D-sub, 3.5mm line in connectors PART CODE VA1912W-2
SUPPLIER www.digitalkind.co.uk
DETAILS www.viewsonic.co.uk

- ✓ Inexpensive
- ✗ No DVI input; lacks sharpness; murky colours

BELINEA 2080 S2

★★★★★

£277 inc VAT

The Belinea 2080 S2 looks simple but sophisticated, with a moulded, brushed-silver surround and a round stand. Like all three 20.1in monitors in this month's test, its screen rotates and swivels. It is also height adjustable. It has one of the widest quoted viewing angles in the group, but we found that stepping to one side results in a visibly darker view of the display. It's not a good choice if you need several people to be able to see the screen at once.

Colours are rich and accurate, and the 2080 S2 was the best of the three 20.1in monitors at displaying high-contrast images. It was also the best when it came to picking out detail in dark areas of photographs and movies, but in all other tests the Philips 200WP7ES performed better.

The built-in speakers are quite loud and don't distort at high volumes, but they sound very tinny. This is a good display, but the Philips 200WP7ES produces a better picture and costs less.



20.1in LCD 1,600x1,200 native resolution, D-sub, DVI, 3.5mm line in connectors
PART CODE 112009
SUPPLIER www.zomp.net
DETAILS www.belinea.com

- ✓ Height-adjustable; sharp; accurate colours
- ✗ Philips 200WP7ES is better value

LG L2000CE

★★★

£185 inc VAT

LG's L2000CE is a sleek, classy-looking monitor, and its silver bezel is one of the thinnest in the group. Like the other 20.1in monitors its screen rotates and swivels from side to side. It is also height adjustable. The L2000CE has a lower native resolution than the other two 20.1in models, running at 1,440x1,050 pixels.

The L2000CE didn't do well at displaying fine details in very dark areas of our test images. Our greyscale transition test showed a lot of banding throughout the gradient, and the L2000CE was unable to show the very lightest greys clearly. High-contrast images lacked detail, giving them a slightly fuzzy look. Colours weren't always accurate. Even after we had adjusted the settings, reds looked a little brownish compared with those produced by the other 20.1in monitors. Colours also appeared over-saturated, giving richly toned images such as fruit an almost luminous appearance.

This is an inexpensive monitor, but it has a relatively low resolution and its image quality is poor. It's not a good buy.



20.1in LCD 1,440x1,050 native resolution, D-sub, DVI connectors PART CODE L2000CE
SUPPLIER www.morecomputers.co.uk
DETAILS <http://uk.lge.com>

- ✓ Nice design; height adjustable
- ✗ Lacks sharpness; over-saturated colours

SAMSUNG 214T

★★★★

£450 inc VAT

Samsung's 214T has a brushed greyish-silver surround and stand. As with the other two standard 20.1in displays, you can swivel its screen from side to side and rotate it through 90°. It is not possible to adjust its height, however.

Some of the 214T's other features suggest that it has been designed for home users. It's the only monitor in this group with S-video and composite video inputs, and it supports picture in picture. This enables you to view an image from the S-video or composite inputs in the corner of the screen, so you can watch a movie or TV while you work. A button on the front allows you to turn this on and off.

Even after careful adjustment, colours appeared a little murky. In movie mode the colours in our test videos were garish and inaccurate. Switching to standard mode improved this considerably, and colours were more accurate if a little muted. This is the most expensive monitor in the entire test, but its image quality does not justify its high price.



21.3in LCD 1,600x1,200 native resolution, D-sub, DVI, composite video, S-video connectors
PART CODE LS21BRBAS
SUPPLIER www.pixmania-pro.co.uk
DETAILS www.samsung.co.uk

- ✓ S-video and composite inputs
- ✗ Expensive, muted colours

ASUS
MW201U

★★★★★

£199 inc VAT

With a shiny aluminium front and stand, Asus's MW201U has a slightly retro design that should blend into both home and office environments. Its DVI port supports HDCP, so it'll be able to play protected high-definition videos when they become available.

It flew through our greyscale test, producing a smooth greyscale transition from black to white with barely any banding using both DVI and D-sub inputs. When viewed side by side, though, black areas in our video clips and photos didn't look as dark as those on the other two 20.1in widescreen displays, and the Asus display wasn't as good at reproducing detail from the dark areas of our test photos. Colours were rich and vivid, but skin tones a bit ruddy. We managed to make them slightly better by adjusting the monitor settings, but this left red areas appearing slightly brown.

This is a decent display, but the Philips 200WP7ES produces better images and is worth the slightly higher price.



20.1in WIDESCREEN LCD 1,680x1,050 native resolution, D-sub, DVI, 3.5mm line in, 3.5mm microphone jack connectors PART CODE MW201U
SUPPLIER www.microdirect.co.uk
DETAILS <http://uk.asus.com>

- ✓ Low price; rich colours
- ✗ Struggles to reproduce detail in dark areas

NEC
20WGX2

★★★★★

£339 inc VAT

NEC's 20WGX2 has a glossy coating that makes colours more vivid, but also makes the screen highly reflective. This may not be a problem at home, where lighting can be adjusted, but it can be a pain when working under office lighting.

This is the brightest monitor in the group test. It's great for games, but you'll want to dim the screen when editing text documents. The viewing angles are narrow, so you'll need to sit directly in front of it for the best picture.

The monitor has four preset modes, but we found that the standard mode produced the best results. High-contrast photos looked great in standard mode, for example, but slightly fuzzy in the dedicated photo mode.

Colours weren't as rich as those from the Philips 200WP7ES, but the 20WGX2 produced the best picture of the 20.1in widescreen displays when watching our test movies. This is a good display, but the cheaper Philips 200WP7ES is better value.



20.1in WIDESCREEN LCD 1,680x1,050 native resolution, D-sub, DVI connectors, four-port USB2 hub PART CODE 60001690
SUPPLIER www.morecomputers.co.uk
DETAILS www.nec.co.uk

- ✓ Bright and clear; accurate colours
- ✗ Expensive; reflective coating can be a problem

PHILIPS
200WP7ES

★★★★★

£253 inc VAT

The Philips 200WP7ES's brushed-silver surround and stand give it a simple, classy style that should fit in anywhere. The screen height can be adjusted between 110mm and 230mm, and it swivels from side to side and rotates into portrait mode. The display also has a built-in four port USB2 hub.

Colours are richer than those from NEC's 20WGX2, but the results still look natural. Our greyscale transition test is particularly hard on monitors, but the 200WP7ES produced one of the smoothest images in the group. It also impressed us when displaying movies and high-contrast still images, reproducing the tiniest details even in the darkest areas.

This display has one of the widest quoted viewing angles in the group and we found that it was still easy to see when standing to one side. This makes it ideal if you ever need to gather a few people around one display. This is a great display, and a good choice if you want a high-quality adjustable screen.



20.1in WIDESCREEN LCD 1,680x1,050 native resolution, D-sub, DVI connectors, four-port USB2 hub PART CODE 200WP7ES/05
SUPPLIER www.lambda-tek.com
DETAILS www.philips.co.uk

- ✓ Adjustable height; good image quality; viewing angles
- ✗ HannsG's HW223DP is better value

BENQ
FP222WH

★★★★★

£220 inc VAT

BenQ's FP222WH is the only monitor in this test to provide an HDMI connector. This makes it easy to connect to an HD DVD player or any other high-definition source. It can scale 720p high-definition video to fit its native resolution of 1,680x1,050.

Unfortunately, this display hasn't been designed to blend easily into a living room. The brushed silver surround and dark purple stand give it a businesslike look that's more suited to office surroundings. We like the way the control buttons are discreetly hidden on the side of the monitor, though, and there are dedicated buttons for both brightness and contrast.

Colours weren't as rich as those from the other two 22in widescreen displays, but the FP222WH did well at picking out details from dark areas of still photos and moving images. We spotted only very slight banding in the lighter shades of our tough greyscale transition test. This is a good widescreen display, but the HannsG HW223DP is cheaper and better.



22in WIDESCREEN LCD 1,680x1,050 native resolution, D-sub, DVI, HDMI connectors PART CODE 9J.03V72.USE
SUPPLIER www.lambda-tek.com
DETAILS www.benq.co.uk

- ✓ Natural colours; sharp; HDMI input
- ✗ HannsG's HW223DP is better value

HANNSG
HW223DP

★★★★★

£194 inc VAT

The HW223DP's moulded curves, brushed-silver surround and black stand look classy and will suit an office or living room. This display supports HDCP, so it's a good choice for high-definition video, and it can scale 1080p video to its native resolution of 1,680x1,050. An adaptor included in the box lets you connect a component video source to its DVI input. There's also a handy four-port USB hub on the side of the monitor.

The HW223DP produces a clear, sharp image using both D-sub and DVI inputs, with colours that look rich and natural. Skin tones look slightly ruddy, but this is noticeable only when viewed alongside other good monitors.

The built-in speakers are among the loudest in the group. They also produce the best sound, with a surprising amount of bass. There are dedicated control buttons for adjusting the volume, but not for brightness or contrast.

This is a versatile display with good image quality at an extremely attractive price.



22in WIDESCREEN LCD 1,680x1,050 native resolution, D-sub, DVI, 3.5mm line in connectors, four-port USB2 hub PART CODE HW223DP
SUPPLIER www.misco.co.uk
DETAILS www.hannsg.co.uk

- ✓ Crisp focus; rich colours; component video input
- ✗ Skin tones look slightly red

IIYAMA
E2200WS

★★★★★

£190 inc VAT

The pleasant-looking E2200WS is made from charcoal-black plastic and has a square stand. Speakers run across the bottom of the screen, along with six square control buttons in the same black plastic. It has dedicated buttons for contrast and brightness.

Unlike the other 22in widescreen displays in this test, the E2200WS comes without any extra features, such as a USB hub or HDMI socket. Its image quality is good, but no better than that of HannsG's HW223DP. Colours look vivid without being over-saturated, and the picture is perfectly crisp. It reproduced our still photographs well, and high-contrast images look good, too.

The built-in speakers are quite loud, but not as loud as the HW223DP's. You can turn the volume up to full without the sound becoming painfully distorted, but like most display speakers they sound quite tinny with little bass.

This is a good screen, but the HannsG HW223DP costs only a little more and includes better speakers and a component video input.



22in WIDESCREEN LCD 1,680x1,050 native resolution, D-sub, DVI, 3.5mm line in, 3.5mm microphone jack connectors PART CODE PLE2200WSV-B1
SUPPLIER www.misco.co.uk
DETAILS www.iiyama.co.uk

- ✓ Sharp; rich, natural colours
- ✗ HannsG's HW223DP is better value

19in LCD			★ BEST BUY	19in WIDESCREEN				💰 BUDGET BUY	
MANUFACTURER	BELINEA	BENQ	IYYAMA	PHILIPS	ACER	AOC	CTX	MIRAI	VIEWSONIC
Model	1905 S1	FP93ES	E1900S	190X7FB	X192w	193SW	W1961A	DML-519W100	VA1912w
Rating	★★★	★★	★★★★★	★★★★	★★★★	★★	★★★	★★★★★	★★
PHYSICAL									
Shape and size	19in	19in	19in	19in	19in widescreen	19in widescreen	19in widescreen	19in widescreen	19in widescreen
Pixel pitch	0.294mm	0.294mm	0.294mm	0.294mm	0.284mm	0.285mm	0.294mm	0.285mm	0.285mm
Native resolution	1,280x1,024	1,280x1,024	1,280x1,024	1,280x1,024	1,440x900	1,440x900	1,440x900	1,440x900	1,440x900
Contrast ratio	500:1	800:1	700:1	800:1	1,000:1	500:1	700:1	500:1	700:1
Brightness	280cd/m²	300cd/m²	300cd/m²	300cd/m²	300cd/m²	300cd/m²	300cd/m²	300cd/m²	280cd/m²
Horizontal viewing angle	150°	160°	150°	160°	160°	150°	160°	150°	150°
Response time	8ms black-to-black	5ms black-to-black	5ms black-to-black	2ms grey-to-grey	5ms black-to-black	8ms black-to-black	5ms black-to-black	8ms black-to-black	5ms black-to-black
Bezel size	23mm	15mm	15mm	32mm	19mm	13mm	20mm	25mm	20mm
Screen depth	60mm	70mm	71mm	55mm	64mm	60mm	60mm	70mm	55mm
Base (WxD)	210x210mm	237x220mm	207x208mm	340x180mm	280x190mm	188x213mm	208x176mm	248x190mm	286x205mm
Screen elevation	95mm	54-113mm	110mm	110mm	103mm	82mm	150mm	92mm	142mm
FEATURES									
Portrait mode	No	No	No	No	No	No	No	No	No
Wall mount option	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
Height adjustable	No	Yes	No	No	No	No	No	No	No
Integrated speakers	No	Yes (1W)	Yes (1W)	Yes (3W)	Yes (1W)	No	Yes (1W)	Yes (2W)	Yes (1W)
Detachable video lead	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
USB hub	No	No	No	One-port USB2	No	No	No	No	No
Integrated power supply	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Kensington lock lug	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
Extras	None	None	None	None	None	None	None	None	None
Video inputs	D-sub	D-sub, DVI	D-sub, DVI	D-sub, DVI	D-sub, DVI	D-sub	D-sub	D-sub, DVI	D-sub
Audio inputs	None	3.5mm line in, 3.5mm microphone jack	3.5mm line in	3.5mm line in, 3.5mm microphone jack	3.5mm line in	None	3.5mm line in	3.5mm line in	3.5mm line in
ENVIRONMENTAL									
Normal power consumption	37W	50W	35W	36W	24W	36W	40W	43W	32W
Suspend power consumption	2W	2W	2W	1W	1W	3W	2W	2W	1W
TCO	TCO 99	TCO 03	TCO 03	TCO 03	TCO 99	TCO 99	TCO 03	TCO 03	TCO 99
BUYING INFORMATION									
Price inc VAT	£159 inc VAT	£146 inc VAT	£138 inc VAT	£170 inc VAT	£149 inc VAT	£115 inc VAT	£122 inc VAT	£111 inc VAT	£116 inc VAT
Supplier	www.eclipsecomputers.com	www.dabs.com	www.pixmania.co.uk	www.morecomputers.co.uk	Acer 0870 853 1005	www.pcnextday.co.uk	www.lambda-tek.com	www.yoyotech.co.uk	www.digitalkind.co.uk
Details	www.belinea.com	www.benq.co.uk	www.iyama.co.uk	www.philips.co.uk	www.acer.co.uk	www.aoc-europe.com	www.cteurope.com	www.mirai.eu	www.viewsonic.co.uk
Warranty	Three years swap out	Three years onsite	Three years onsite	Three years swap out	Three years return to base	Three years onsite	Three years onsite	Three years swap out	Three years return to base
Part code	1905S1	9JL2V7ZHSE	PLE1900S-B2S	190X7FB	ET.L9508.075	193SW	W1961A	DML-519W100	VA1912W-2

20.1in LCD			21.3in LCD	20.1in WIDESCREEN			22in WIDESCREEN	★ BEST BUY	
MANUFACTURER	BELINEA	LG	SAMSUNG	ASUS	NEC	PHILIPS	BENQ	HANNSG	IYYAMA
Model	2080 S2	L2000CE	214T	MW20IU	20WGX2	200WP7ES	FP222WH	HW223DP	E2200WS
Rating	★★★★	★★	★★★	★★★★	★★★★	★★★★★	★★★★	★★★★★	★★★★
PHYSICAL									
Shape and size	20.1in	20.1in	21.3in	20.1in widescreen	20.1in widescreen	20.1in widescreen	22in widescreen	22in widescreen	22in widescreen
Pixel pitch	0.255mm	0.291mm	0.270mm	0.258mm	0.258mm	0.258mm	0.282mm	0.282mm	0.282mm
Native resolution	1,600x1,200	1,440x1,050	1,600x1,200	1,680x1,050	1,680x1,050	1,680x1,050	1,680x1,050	1,680x1,050	1,680x1,050
Contrast ratio	1,000:1	700:1	900:1	700:1	700:1	1,000:1	700:1	800:1	1,000:1
Brightness	300cd/m ²	300cd/m ²	300cd/m ²	300cd/m ²	470cd/m ²	300cd/m ²	300cd/m ²	300cd/m ²	300cd/m ²
Horizontal viewing angle	178°	178°	178°	170°	178°	178°	170°	160°	170°
Response time	16ms black-to-black	8ms grey-to-grey	8ms grey-to-grey	2ms grey-to-grey	8ms grey-to-grey	8ms grey-to-grey	5ms black-to-black	5ms black-to-black	5ms black-to-black
Bezel size	20mm	16mm	17mm	17mm	20mm	22mm	20mm	15mm	20mm
Screen depth	80mm	85mm	70mm	77mm	80mm	70mm	80mm	80mm	68mm
Base (WxD)	260x270mm	240x240mm	275x222mm	220x222mm	200x240mm	400x200mm	278x168mm	365x200mm	287x180mm
Screen elevation	60-190mm	115-200mm	120mm	90mm	110mm	110-230mm	100mm	90mm	83mm
FEATURES									
Portrait mode	Yes	Yes	Yes	No	No	Yes	No	No	No
Wall mount option	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Height adjustable	Yes	Yes	No	No	No	Yes	No	No	No
Integrated speakers	Yes (1W)	No	No	Yes (1W)	No	No	No	Yes (3W)	Yes (1W)
Detachable video lead	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
USB hub	No	No	No	No	Four-port USB2	Four-port USB2	No	Four-port USB2	No
Integrated power supply	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Kensington lock lug	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Extras	None	None	None	None	None	None	None	None	None
Video inputs	D-sub, DVI	D-sub, DVI	D-sub, DVI, composite video, S-video	D-sub, DVI	D-sub, DVI	D-sub, DVI	D-sub, DVI, HDMI	D-sub, DVI, component video	D-sub, DVI
Audio inputs	3.5mm line in	None	None	3.5mm line in, 3.5mm microphone jack	None	None	None	3.5mm line in	3.5mm line in, 3.5mm microphone jack
ENVIRONMENTAL									
Normal power consumption	60W	50W	65W	65W	92W	50W	49W	49W	60W
Suspend power consumption	1W	1W	2W	2W	2W	1W	2W	1W	2W
TCO	TCO 03	TCO 03	TCO 03	None	TCO 03	TCO 03	TCO 03	TCO 03	TCO 03
BUYING INFORMATION									
Price inc VAT	£277 inc VAT	£185 inc VAT	£450 inc VAT	£199 inc VAT	£339 inc VAT	£253 inc VAT	£220 inc VAT	£194 inc VAT	£190 inc VAT
Supplier	www.zomp.net	www.morecomputers.co.uk	www.pixmania-pro.co.uk	www.microdirect.co.uk	www.morecomputers.co.uk	www.lambda-tek.com	www.lambda-tek.com	www.misco.co.uk	www.misco.co.uk
Details	www.belinea.com	http://uk.lge.com	www.samsung.co.uk	http://uk.asus.com	www.nec-display-solutions.co.uk	www.philips.co.uk	www.benq.co.uk	www.hannsg.co.uk	www.iyama.co.uk
Warranty	Three years swap out	Three years swap out	Three years onsite	Three years swap out	Three years collect and return	Three years swap out	Three years onsite	Three years swap out	Three years onsite
Part code	112009	L2000CE	LS21BRBAS	MW20IU	60001690	200WP7ES/05	9J03V7Z.USE	HW223DP	PLE2200WSV-B1

Labs verdict LCDs

There are many good displays here, but a few stand out. Whether you want an inexpensive 19in display or an enormous high-resolution widescreen model, you'll find it here.

If you want an inexpensive widescreen display, we recommend Mirai's DML-519W100. At just £111 it's the cheapest display here, but it has the best image quality of all the 19in widescreen models. It's great value and our Budget Buy. Widescreen models are ideal for gaming and watching

DVDs, but if you use your PC for work you might find a standard 19in display more convenient. Iiyama's E1900S is the best here, producing a sharp image and rich, natural colours. It's our Best Buy.

If you want a larger widescreen display, there are two great options. The Philips 200WP7ES produces excellent images, and you can adjust the height and orientation. If you can live without this feature, though, we recommend the HannsG HW223DP. It also produces excellent images, and at just £194 including VAT it's a bargain. It's our Best Buy. 

